U.S. Pat. Appl. Ser. No. 10/583,290 Attorney Docket No. 10191/4753 Reply to Office Action of September 17, 2008

## Amendments to the Claims

Without prejudice, this courtesy listing of the claims replaces all prior versions and listings of the claims in the present application:

## **Listing of the Claims:**

Claims 1-8 (Canceled).

9. (Currently Amended) A system, comprising:

a plurality of sensors, each sensor including a transmitter and a receiver for signals, wherein:

one of the sensors being able to receive a cross echo signal of another of the sensors, each of the sensors one of receives and analyzes one of self-echo signals and cross echo signals only for specific intervals relating to a time delay of a reception signal in relation to a transmission signal of its own, and

a phase angle of the repetition frequency  $f_{\rm w}$  of the transmission signal is selected differently for each sensor.

- 10. (Currently Amended) The system as recited in Claim [[8]] 9, wherein the sensors include one of communicating radar sensors, communicating optical sensors, and communicating ultrasound sensors.
- 11. (Currently Amended) The radar system as recited in Claim [[9]] 10, wherein a carrier signal modulated by a PN code using one of ASK, PSK, BPSK, FSK, and a combination of at least two of ASK, PSK, BPSK, and FSK is used for the transmission signals of the radar sensors.
- 12. (Currently Amended) The radar system as recited in Claim [[10]]  $\underline{11}$ , wherein each of the radar sensors monitors a distance range  $(r_a; r_b)$  to be monitored from the interval  $(0m; R_{max})$  where:  $0m \le r_a \le r_b \le R_{max}$ .

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13. (Canceled).

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- 14. (Currently Amended) The radar system as recited in Claim [[9]] 10, wherein a first radar sensor receives the cross echoes of n-1 additional communicating radar sensors in the distance ranges  $\frac{(c/2t_{s2...n})+r_a;c/(2t_{s2...n})+r_b}{[c/(2t_{s2...n})+r_a;c/(2t_{s2...n})+r_b]}$ .
- 15. (Currently Amended) The radar system as recited in Claim [[9]] 10, wherein each radar sensor has a plurality of receivers, and wherein a self-echo signal and (n-1) cross echo signals are evaluated at least one of simultaneously and sequentially in a radar sensor when simultaneous evaluation of [[a]] the plurality of receivers is provided.